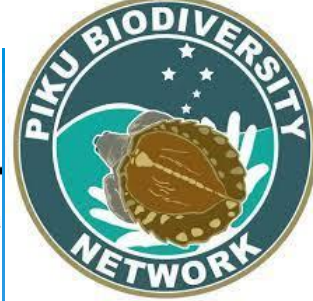


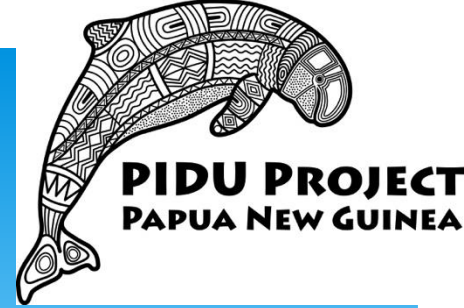
# PIDU (Whale and Dolphin) Project – Papua New Guinea



**Dr. Isabel Beasley, Yolarnie Amepou, Wilma Mavea and Vagi Rei**  
**Snubfin Dolphin Conservation Project and Piku Biodiversity Network**  
**In collaboration with University Papua New Guinea, Conservation and Environment Protection Authority and PNG National Museum and Art Gallery**



# Project Aim



**Contribute to research, conservation, and management of marine mammals in Papua New Guinea, with a primary focus on community-based research and conservation in the Kikori Delta, Gulf Province.**

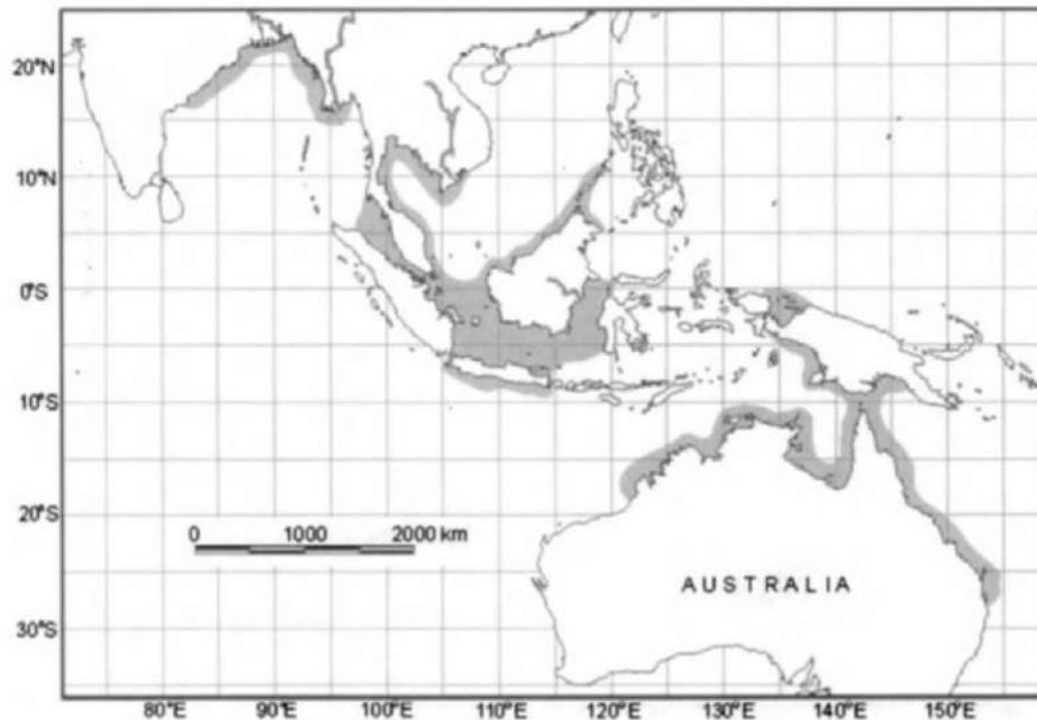


# Kikori Delta



## Four marine mammal species recorded from inshore Gulf Province of PNG

- Australian snubfin dolphin
- Australian humpback dolphin
- Indo-Pacific bottlenose dolphin
- Dugong



Australian snubfin  
dolphin  
*Orcaella heinsohni*



Indo-Pacific  
bottlenose dolphin  
*Tursiops aduncus*



Indo-Pacific humpback  
dolphin  
*Sousa chinensis*



Dugong  
*Dugong dugon*

# Further Project Background - Kikori Public Report



Public Report

## Looking for Pidū (Dolphins and Dugongs) in the Kikori Delta of Papua New Guinea Public Report

Isabel Beasley and Wilma Maves  
PIDU Project



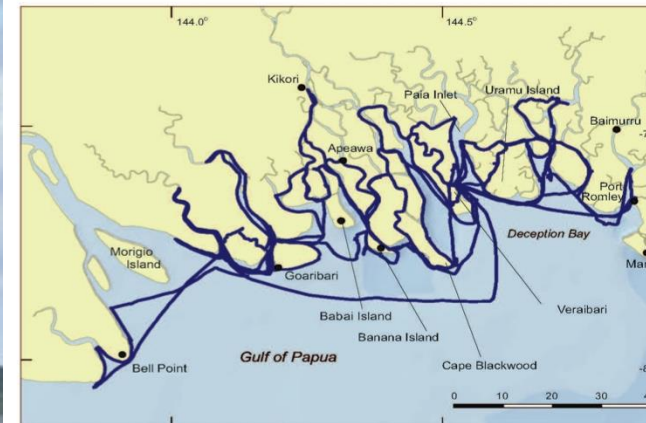
# PIDU Project Surveys – Community Workshops

- Introduce Project and Dolphins to Community
- Potentially Important Areas
- Identify Threats



# PIDU Project Surveys – Boat Surveys

Remote Area Difficult to Access --- Complex Delta System --- Cover Area Twice



# PIDU Project Surveys – Photo-identification

Species Confirmation --- Abundance





# PIDU Project Surveys – Interview Surveys

Species Present --- Potentially Important Areas --- Mortality Rates and Causes



# PIDU Project Surveys

## – Skeletal Material & Carcass Recovery

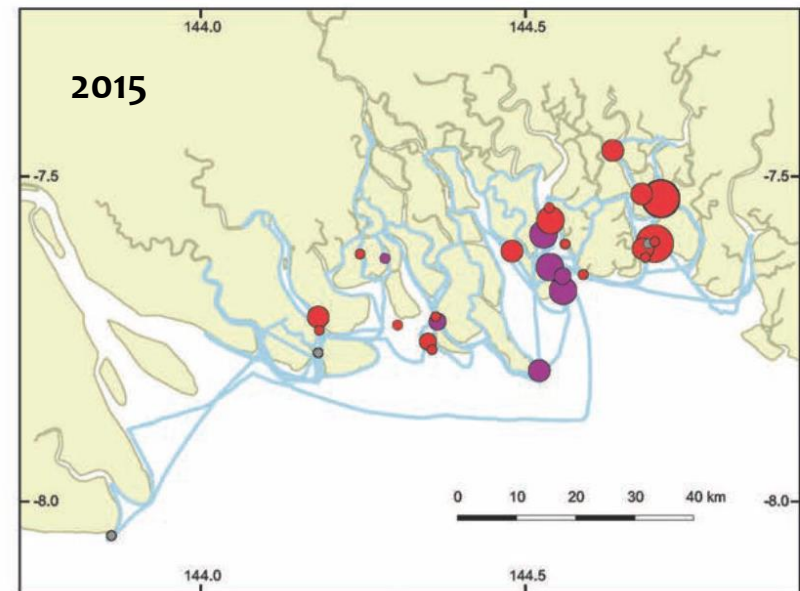
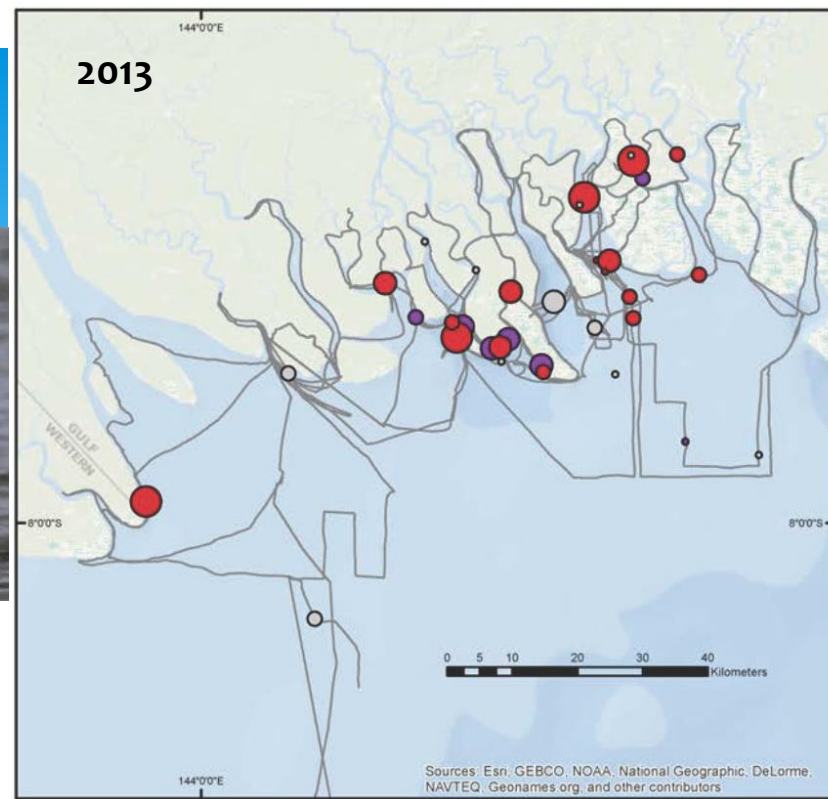
Taxonomic Status  
Mortality Rates and Causes



# Results - Dolphin Sightings



- Australian snubfin and Australian humpback dolphins sighted
- No abundance estimates possible because dolphins too shy and cryptic to photo-identify
- Likely snubfin @ <200 & humpback @ <100
- No dugong sighted, but reported to occur in the Delta



# Results – Known Dolphin Mortalities

## 2013 & 2015

- **16 specimens recovered**
- 8 snubfin skulls
- 1 humpback skull
- 6 snubfin carcasses
- 1 humpback carcass



During 2015 surveys:

**6 fresh snubfin carcasses found during 10 survey days!**

4 snubfin dolphins definitely by-caught in large-mesh fishing gear

## 2019

- **13 specimens recovered**
- 5 snubfin skulls
- 1 humpback skull
- 6 snubfin carcasses
- 1 humpback carcass

## 2020

- **18 specimens recovered**
- 11 snubfin skulls
- 1 humpback skull
- 2 snubfin carcasses
- 1 humpback carcass
- 3 species to be confirmed

## Mortality rate likely unsustainable

- Future abundance surveys are required to assess Potential Biological Removal
- A project officer needs to be based in Kikori year-round to collect accurate information on mortality rates

# Threats

By-catch in gillnet fisheries – particularly those targeting large fish for their swim bladders

Direct Catch??



Pox-like virus (water quality?)



Plastics and marine debris

# Project Successes – Species Descriptions

Australian snubfin  
dolphin  
*Orcaella heinsoni*



Australian  
humpback  
dolphin  
*Sousa  
sahulensis*

Author's personal copy

CHAPTER NINE

## Observations on Australian Humpback Dolphins (*Sousa sahulensis*) in Waters of the Pacific Islands and New Guinea

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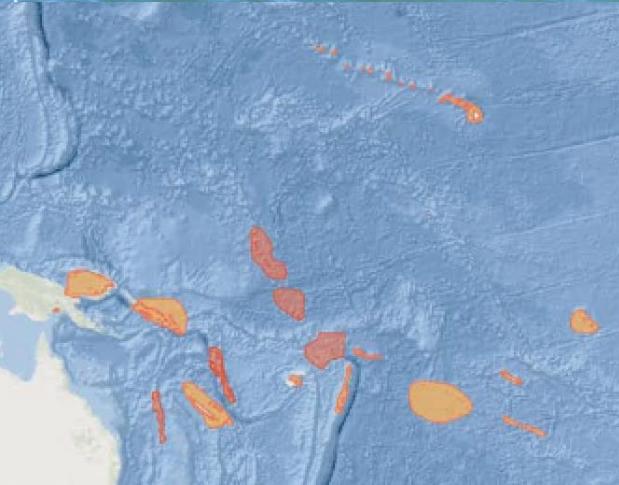
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>> Confirming which marine mammal species occur  
in PNG waters, and their conservation status

# Project Successes – IMMA Designation



MARINE MAMMAL PROTECTED AREAS TASK FORCE



AGENCE FRANÇAISE  
POUR LA BIODIVERSITÉ  
ÉTABLISSEMENT PUBLIC DE L'ÉTAT



## IMMA Regional Workshop for the Pacific Islands

Apia, Samoa, 27-31 March 2017

**FINAL REPORT of the WORKSHOP**

>> Identifying Internationally Important Marine Mammal Areas where future management and research efforts can be focused

# Project Successes – Local Partner and Community Involvement



>> Importantly, management that helps marine megafauna will also assist local communities which rely on coastal resources and a healthy ecosystem





# Project Successes – PNG LNG Scholarship Program



>> Helping to build capacity and knowledge of PNG students and researchers

- One Masters student graduated from James Cook University – Elizah Nagombi
- One Honors student graduated from University PNG – Wilma Mavea
- Two Honors students currently enrolled at University PNG – Jacinta Jonathan and Lythia Mizigi



# Project Challenges

- **Very expensive to conduct research and conservation in PNG - particularly in remote regions where boat-work is required**
- **Dolphin conservation is not a priority for Kikori communities or Gulf Provincial Administration**
- **Having the area designated as an IMMA currently means nothing to people on the ground - more awareness and on-ground activities are required**
- **PIDU project staff need to be based in Kikori year-round, not just visiting once or twice a year**
- **Reducing by-catch in gillnet fisheries extremely difficult because of the huge financial benefit fishers obtain from selling the fish swim-bladders (discussed further by Michael Grant in Shark and Ray SPREP meeting)**

# Future Project Directions

- Collaborate with the Piku Biodiversity Network (PBN) and other project partners to:
  - **Monitor inshore dolphin mortalities** in the Kikori Delta, and collect samples/by-catch information where possible;
  - Conduct **community workshops and discussions in Gulf Province** regarding by-catch reduction strategies.
- Collaborate with PBN, CEPA and project partners to
  - **conduct further research** in Kikori, particularly to estimate abundance of inshore dolphins
- Continue the **PNG LNG – PIDU Scholarship Program**



# Acknowledgements

>> Particular thanks to:

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- UPNG – Dr. Augustine Mungkaje
- CEPA – Vagi Rei
- PNG National Museum and Art Gallery – Jim Animato
- All project participants

